

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. – 10. (Canceled)

11. (New) A heat exchanger with a disk structure comprising:
a plurality of disks, wherein each pair of adjacent disks defines an intermediate space through which a heat transfer medium is configured to flow;

a heat transfer medium inlet;

a heat transfer medium outlet; and

a first set of at least two heat transfer medium ducts in fluid communication between each intermediate space and one of the heat transfer medium inlet and the heat transfer medium outlet,

wherein the first set of at least two heat transfer medium ducts runs perpendicular to the plane of the disks.

12. (New) The heat exchanger as claimed in claim 11, wherein each intermediate space has a first set of two openings configured to permit flow to enter the intermediate space and a second set of two openings configured to permit flow to exit the intermediate space.

13. (New) The heat exchanger as claimed in claim 12, wherein the first set of at least two heat transfer medium ducts is in fluid communication between the first set of two openings of each intermediate space and the heat transfer medium inlet, and wherein a second set of at least two heat transfer medium ducts is in fluid communication between the second set of two openings and the heat transfer medium outlet.

14. (New) The heat exchanger as claimed in claim 13, wherein each disk in the plurality of disks has an axially symmetrical design, based on its transverse axis, with regard to the first set of at least two heat transfer medium ducts and the second set of at least two heat transfer medium ducts.

15. (New) The heat exchanger as claimed in claim 12, wherein regions of the first and second sets of two openings have a raised design such that charge air can flow through and be cooled between the pairs of adjoining disks.

16. (New) The heat exchanger as claimed in claim 11, wherein each disk in the plurality of disks has an axially symmetrical design, based on its longitudinal axis, with regard to the at least two heat transfer medium ducts.

17. (New) The heat exchanger as claimed in claim 11, wherein the heat transfer medium inlet has a branching section.

18. (New) The heat exchanger as claimed in claim 17, wherein the branching section is designed in a form of an arc of a circle.

19. (New) The heat exchanger as claimed in claim 17, wherein a bend of 30° to 90°, as seen in a flow direction, is provided in a region of the branching section.

20. (New) The heat exchanger as claimed in claim 17, wherein a portion of the heat transfer medium inlet that merges into the at least two heat transfer medium ducts after the branching section runs parallel to the at least two heat transfer medium ducts, and wherein a bipartite part of the branching section is arranged in a plane which is perpendicular to the at least two heat transfer medium ducts.

21. (New) The heat exchanger as claimed in claim 11, wherein the heat transfer medium outlet has a converging section.

22. (New) The heat exchanger as claimed in claim 21, wherein the converging section is designed in a form of an arc of a circle.

23. (New) The heat exchanger as claimed in claim 21, wherein a bend of 30° to 90°, as seen in a flow direction, is provided in a region of the converging section.

24. (New) The heat exchanger as claimed in claim 21, wherein a portion the heat transfer medium outlet that merges from the at least two heat transfer medium ducts into the converging section runs parallel to the at least two heat transfer medium ducts, and wherein a

bipartite part of the converging section is arranged in a plane which is perpendicular to the at least two heat transfer medium ducts.

25. (New) The heat exchanger as claimed in claim 11, wherein the heat exchanger is a charge-air/coolant radiator or oil cooler.

26. (New) The heat exchanger as claimed in claim 11, wherein each intermediate space is configured such that the heat transfer medium is distributed over an entire width of the intermediate space.